A Big Earth Data Platform for Three Poles

**Landuse/landcover dataset in the middle reaches of the Heihe River Basin (2011)**

1、Description

The land use / land cover data set of Heihe River Basin in 2011 is the Remote Sensing Research Office of Institute of cold and drought of Chinese Academy of Sciences. Based on the remote sensing data of landsatm and ETM in 2011, combined with field investigation and verification, a 1:100000 land use / land cover image and vector database of Heihe River Basin is established.
The data set mainly includes 1:100000 land use graph data and attribute data in the middle reaches of Heihe River Basin.
The land cover data of 1:100000 (2011) in Heihe River Basin and the previous land cover are classified into six first-class categories (cultivated land, forest land, grassland, water area, urban and rural residents, industrial and mining land and unused land) and 25 second-class categories by the same hierarchical land cover classification system. The data type is vector polygon and stored in shape format.
Land cover classification attributes:
Level 1 type level 2 type attribute code spatial distribution location
Cultivated land: plain dry land 123 is mainly distributed in basin, piedmont, river alluvial, proluvial or lacustrine plain (poor irrigation conditions due to water shortage).
The upland and land 122 is mainly distributed in the hilly area, and generally, the plot is distributed on the gentle slope of the hill, as well as on the top of the ridge and the base.
The dry land 121 is mainly distributed in the mountainous area, the hillside (gentle slope, hillside, steep slope platform, etc.) and the Piedmont belt below 4000 m above sea level.
Woodland: there are woodland (Arbor) 21 mainly distributed in high mountains (below 4000 meters above sea level) or middle mountain slopes, valley slopes, mountain tops, plains, etc.
Shrub land 22 is mainly distributed in the higher mountain area (below 4500m), most of which are hillside, valley and sandy land.
Sparse forest land 23 is mainly distributed in mountainous areas, hills, plains and sandy land, Gobi (Loamy, sandy conglomerate) edge.
Other forest lands 24 are mainly distributed around the oasis ridge, riverside, roadside and rural residential areas.
Grassland: high cover grassland 31 is generally distributed in mountainous area (gentle slope), hilly area (steep slope), river beach, Gobi, sandy land, etc.
The middle cover grassland 32 is mainly distributed in dry areas (low-lying land next door and land between Sandy Hills, etc.).
Low cover grassland 33 mainly grows in dry areas (loess hills and sand edge).
Water area: channel 41 is mainly distributed in plain, inter Sichuan cultivated land and inter mountain valley.
Lake 42 is mainly distributed in low-lying areas.
Reservoir pond 43 is mainly distributed in plain and valley between rivers, surrounded by residential land and cultivated land.
Glaciers and permanent snow cover 44 are mainly distributed on the top of (over 4000) mountains.
The beach land 46 is mainly distributed in the valley, piedmont, plain lowland, the edge of river lake basin and so on.
Residential land: urban land 51 is mainly distributed in plain, mountain basin, slope and gully platform.
Rural residential land 52 is mainly distributed in oasis, cultivated land and roadside, tableland, slope, etc.
Industrial and mining land and traffic land 53 are generally distributed in the periphery of cities and towns, more developed traffic areas and industrial mining areas.
Unused land: sand 61 is mostly distributed in the basin, both sides of the river, the river bay and the periphery of the mountain front Gobi.
Gobi 62 is mainly distributed in the Piedmont belt with strong wind erosion and sediment transport.
Salt alkali 63 is mainly distributed in relatively low and easy to accumulate water, dry lakes and lakeside.
Swamp 64 is mainly distributed in relatively low and easy to accumulate water.
Bare soil 65 is mainly distributed in the arid areas (mountain steep slopes, hills, Gobi), and the vegetation coverage is less than 5%.
Bare rock 66 is mainly distributed in the extremely dry stone mountain area (windy, light rain).
The other 67 are mainly distributed in the exposed rocks formed by freezing and thawing over 4000 meters, also known as alpine tundra.
Projection parameters:
Projection ALBERS
Units METERS
Spheroid Krasovsky
Parameters:
25 00 0.000 /\* 1st standard parallel
47 00 0.000 /\* 2nd standard parallel
105 00 0.000 /\* central meridian
0 0 0.000 /\* latitude of projection's origin
0.00000 /\* false easting (meters)
0.00000 /\* false northing (meters)

2、Keywords

Theme：land cover,Land use,Land Resources
Discipline：Human-nature Relationship
Places：Heihe River Basin, Middle Reaches of Heihe River Basin
Time：2011

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：106.0MB

4.Data format：shp

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：41.0 | - |
| west：97.0 | - | east：102.0 |
| - | south：37.63 | - |

5、Time frame:2018-11-20 02:48:23+00:00--2018-11-20 02:48:23+00:00

6、Reference method

References to data:

WANG Jianhua. Landuse/landcover dataset in the middle reaches of the Heihe River Basin (2011). A Big Earth Data Platform for Three Poles, doi:10.11888/Socioeco.tpdc.2708122014

References to articles:

7、Supporting project information

8、Data resource provider

name: WANG Jianhua
unit: Cold and Arid Regions Environmental and Engineering Research Institute, Chinese Academy of Sciences
email: jhwang@lzb.ac.cn